

AMENDMENTS TO THE CLAIMS

1. (Cancelled)
2. (Cancelled)
3. (Currently Amended) [[A]] The machine according to claim [[1]] 20, in which the ~~brightness~~
~~sensor measurement element~~ is capable of detecting adapted to detect changes in voltage caused
by differences in brightness.
4. (Currently Amended) [[A]] The machine according to claim [[1]] 20, ~~having two or more~~
~~light sources~~, comprising a plurality of light sources of different colours.
5. (Currently Amended) [[A]] The machine according to claim [[1]] 20, further comprising a
collecting device for the waste, ~~a said brightness sensor being~~ wherein the photoelectric sensor is
arranged to monitor waste in the collecting device.
6. (Currently Amended) [[A]] The machine according to claim 5, in which the collecting device
is a pneumatic pipe-line.
7. (Currently Amended) [[A]] The machine according to claim 5, in which the collecting device
is a suction removal hood.
8. (Currently Amended) [[A]] The machine according to claim 5, in which the waste ~~can be~~ is
conveyed through the collecting device.

9. (Currently Amended) [[A]] The machine according to claim 5, in which the ~~brightness~~ photoelectric sensor is arranged in a wall region of the collecting device.
10. (Currently Amended) [[A]] The machine according to ~~any~~ claim 5, in which there are a plurality of suction removal hoods and guide vanes, and at least one separate ~~brightness~~ photoelectric sensor is associated with each suction hood location or each guide vane.
11. (Currently Amended) [[A]] The machine according to claim 5, comprising a central waste-collecting line, the ~~brightness~~ photoelectric sensor being associated with the central waste-collecting line.
12. (Currently Amended) [[A]] The machine according to claim [[1]] 20, comprising an electronic evaluation device arranged to determine one or more parameters selected from: the variation of the brightness of the good fibres; the coefficient of variation of the brightness of the good fibres; and the standard deviation of the brightness of the good fibres.
13. (Currently Amended) [[A]] The machine according to claim [[1]] 20, comprising a control device ~~which can~~ adapted to compare the measured results with prespecified quantities and, in the event of a departure therefrom, effect a modification of the waste separation.
14. (Currently Amended) [[A]] The machine according to claim 12, which comprises at least one waste separation element being adjustable in dependence on measurement results from the evaluation device.

15. (Currently Amended) [[A]] The machine according to claim 14, in which the or each waste separation element is a guide vane or a separating blade.

16. (Currently Amended) [[A]] The machine according to claim 14, which further comprises at least one angle-measuring device, the angle-measuring device and the evaluation device being connected to a control and regulation device.

17. (Currently Amended) [[A]] The machine according to claim [[1]] 20, in which the measurement results are usable in a control and regulation circuit for optimizing the cleaning of the fibre material.

18. (Currently Amended) [[A]] The machine according to claim [[1]] 20, in which the sensor arrangement ~~can be used for determining~~ is adapted to detect a blockage of fibre material in the collecting device.

19. (Cancelled)

20. (New) A spinning preparation machine in which waste is separated from fibre material, comprising:

a sensor arrangement comprising a light source adapted to project light onto the waste, and a photoelectric sensor adapted to detect light reflected from the waste and convert the reflected light into electrical signals; and

a measurement element adapted to measure the electrical signals.

21. (New) A spinning preparation machine in which waste is separated from fibre material, comprising:

a collecting device through which the waste moves;

at least one sensor arrangement associated with the collecting device, the sensor arrangement comprising a light source adapted to project light onto the waste, and a photoelectric sensor adapted to detect light reflected by good fibres in the waste and convert the reflected light into electrical signals; and

a measuring element adapted to measure the electrical signals.